PUSH-TO-TALK TELECOMMUNICATIONS SYSTEM UTILIZING AN VOICE-OVER-IP NETWORK

## ABSTRACT

A method and system to provide push-to-talk from one user to another in a wireless packet data telecommunications network is described. The system may include: a wireless communication network including push-to-talk (PTT) functionality, with a Session Initiation Protocol (SIP) Proxy Server; a SIP Registrar and Location Server operable to store contact addresses of active mobile devices; a Realtime Transport Protocol (RTP) Media Gateway (PTT Server) operable to function as a call endpoint for each of a plurality of mobile devices wherein the plurality of mobile devices are segmented into membership groups, the PTT Server further operable to multicast a communication from one member of the group to the other members of the group; and an Internet Protocol (IP) network interconnecting the SIP Proxy server, the SIP Registrar and Location Server, and the PTT Server.